

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number
WO 2004/082533 A1

(51) International Patent Classification⁷: **A61F 2/06**

(21) International Application Number:
PCT/GB2004/001155

(22) International Filing Date: 18 March 2004 (18.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0306176.9 18 March 2003 (18.03.2003) GB
0317003.2 21 July 2003 (21.07.2003) GB

(71) Applicant (for all designated States except US): **VERYAN MEDICAL LIMITED [GB/GB]; Old Pockford Cottage, Vann Lane, Chiddingfold GU8 4XU (GB).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CARO, Colin, G. [GB/GB]; Imperial College of Science, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB). WATKINS, Nicholas, V. [GB/GB]; Imperial College of Science, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB). FLAZON, Brian, G. [GB/GB];**

Imperial College of Science, Technology and Medicine, Exhibition Road, London SW7 2AZ (GB). BIRCH, Phillip, L. [GB/GB]; Old Pockford Cottage, Vann Lane, Chiddingfold GU8 4XU (GB).

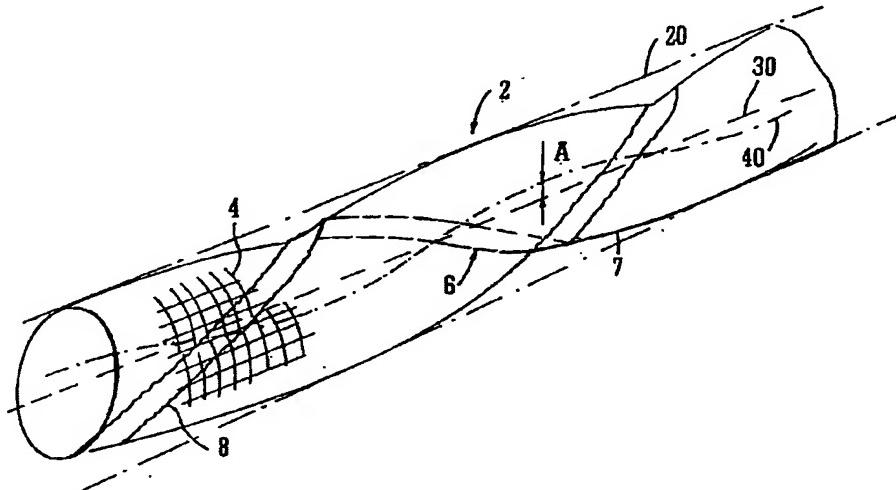
(74) Agent: **FRANK B.DEHN & CO.; 179 Queen Victoria Street, London EC4V 4EL (GB).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,

[Continued on next page]

(54) Title: HELICAL STENT



WO 2004/082533 A1

(57) **Abstract:** A stent (2) for insertion in a fluid conduit of the human or animal body when the stent is in a collapsed condition and for expansion to an expanded condition, the stent comprising an outer wall (7) for engagement with the conduit, the outer wall having a helical portion (6) which in the expanded condition extends longitudinally and circumferentially, and which, upon expansion of the stent from the collapsed condition to the expanded condition, resists extension.

BEST AVAILABLE COPY